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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,463	11/23/2005	Ying Zhang	200507001-1	3795

40079 7590 06/26/2009
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EXAMINER

HENRY, MICHAEL C

ART UNIT	PAPER NUMBER
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1623

MAIL DATE	DELIVERY MODE
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06/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,463	Applicant(s) ZHANG ET AL.	
	Examiner MICHAEL C. HENRY	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action 01/27/09 is persuasive, therefore, **the finality of that action is withdrawn.**

The following office action is a responsive to the Amendment filed, 01/27/09.

The amendment filed 01/27/09 affects the application, 10/538,463 as follows:

Claims 4-6 and 14 have been canceled. Applicants' amendments have overcome the rejection made under 35 U.S.C. 103(a). Consequently, the said rejection is withdrawn.

Upon further consideration it was determined that the indication of allowable subject matter was not appropriate. Thus, the said allowable subject matter is withdrawn.

However, a new ground rejection is made herein below.

The responsive to applicants' amendments is contained herein below.

Claims 8-11 are pending in application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwai et al. (US 6,387,417).

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Claim 9 is drawn to a method for intensifying SOD activity or reducing MDA level of the skin or hair in a subject comprising administering to a subject a therapeutically effective amount of total triterpenoid sapogenins extracted from bamboo, wherein total triterpenoid sapogenins is 10-90% as determined by vanillic aldehyde and perchloric acid colorimetry using friedelin as a standard, said total triterpenoid sapogenins comprising 5-35% friedelin and 1-10% lupenone as determined by GC-MS to intensify SOD activity or to reduce MDA level of the skin or hair, wherein said therapeutically effective amount of total triterpenoid sapogenins is administered externally onto the skin or hair in a daily cosmetic.

Iwai et al. disclose that low striped bamboo extract contains triterpenoids (.beta.-amylene and friedelin) as major ingredients, and sugars such as residual lignin, reduction sugar and glucose (see col. 4, lines 24-37). Furthermore, Iwai et al. disclose that an animal or site that is infected with vancomycin resistant Enterococcus (a bacteria) can be treated with the bamboo extract by administered said bamboo to said animal or site (see claims). It should be noted that examiner considers the intensifying of SOD activity and reducing of MDA level an inherent effects or mechanisms by which the bamboo extract exerts its infection treatment.

The difference between applicant's claimed method and the method of Iwai et al. is that Iwai et al. do not disclose the mechanism by which the bamboo extract treats said infection and do not explicitly disclose the total % of triterpenoid sapogenins and the % of friedelin and lupenone in their composition. However, it should be noted that Ohmoto et al.'s composition is obtained from the same source as applicant's composition and comprises the same component or substance (friedelin) as applicant's composition and consequently should have the same total percentages (%) of triterpenoid sapogenins and the same % of friedelin and lupenone.

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It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made, in view of Iwai et al., to treat infections by administering or applying Iwai et al.'s bamboo extract to an animal or infected site such as skin and to determine the mechanism(s) (such as intensifying of SOD activity or reducing of MDA level of the skin) by which the bamboo extract treats said infection and to also determine the percentages (%) of triterpenoid sapogenins such as the % of friedelin and lupenone in order to optimize the treatment, based on factors such as availability, cost, convenience and/or need.

One having ordinary skill in the art would have been motivated in view of Iwai et al., to treat infections by administering or applying Iwai et al.'s bamboo extract to an animal or infected site such as skin and to determine the mechanism(s) (such as intensifying of SOD activity or reducing of MDA level of the skin) by which the bamboo extract treats said infection and to also determine the percentages (%) of triterpenoid sapogenins such as the % of friedelin and lupenone in order to optimize the treatment, based on factors such as availability, cost, convenience and/or need.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (Bull Fac Agr, Meiji Univ (115): 39-44, 1998).

Claim 10 is drawn to a method of inhibiting growth of cancer cells or tumor cells, comprising treating the cancer cells or tumor cells a therapeutically effective amount of total triterpenoid sapogenins extracted from bamboo, wherein total triterpenoid sapogenins is 10-90% as determined by vanillic aldehyde and perchloric acid colorimetry using friedelin as a standard, said total triterpenoid sapogenins comprising 5-35% friedelin and 1-10% lupenone as determined

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by GC-MS. Claim 11 is drawn to the method according to claim 10, wherein the total triterpenoid sapogenins is pentacyclic triterpenoid sapogenins.

Kobayashi et al. disclose that an extract of bamboo leaves suppress (inhibit) markedly the development and growth of spontaneous mammary tumors of SHN mice (see page 39, last line to page 40, lines 1-3, summary and entire article).

The difference between applicant's claimed method and the method of Kobayashi et al. is that Kobayashi et al. do not disclose the components and their percentages in said bamboo extract. However, Kobayashi et al.'s composition is obtained from the same source as applicant's composition (bamboo) and should comprise the same components or substances (friedelin and lupenone) as applicant's composition and consequently should have the same total percentages (%) of triterpenoid sapogenins and the same % of friedelin and lupenone.

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made, in view of Kobayashi et al., to treat or inhibit the growth of cancer cells or tumor cells, comprising treating the cancer cells or tumor cells with Kobayashi et al.' extract from bamboo and to determine the components and their percentages in said bamboo extract such as the percentages (%) of triterpenoid sapogenins and the % of friedelin and lupenone in order to optimize the treatment, based on factors such as availability, cost, convenience and/or need.

One having ordinary skill in the art would have been motivated in view of Kobayashi et al., to treat or inhibit the growth of cancer cells or tumor cells, comprising treating the cancer cells or tumor cells with Kobayashi et al.' extract from bamboo and to determine the components and their percentages in said bamboo extract such as the percentages (%) of triterpenoid

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sapogenins and the % of friedelin and lupenone in order to optimize the treatment, based on factors such as availability, cost, convenience and/or need.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The examiner has found claim 8 to be unobvious over the prior art of record and therefore to be allowable over the prior art of record. The present invention relates a method of treating hypertension, comprising administering to a subject suffering from said hypertension a therapeutically effective amount of a specific triterpenoid sapogenins composition extracted from bamboo. The prior art does not teach or suggest the method of the instant invention as set forth in claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Henry
June 23, 2009.

/Shaojia Anna Jiang/
Supervisory Patent Examiner
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